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(19) (CA) **APPLICATION FOR CANADIAN PATENT** (12)

(54) Dog Tethering Device for Bicycles

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(71) Same as inventor

(57) 7 Claims

Notice: This application is as filed and may therefore contain an incomplete specification.



2151542

ABSTRACT

A dog tethering device suitable for exercising a dog or other animal from a bicycle, the device comprising an elongated tethering member having a first means of securing the member to a bicycle axle and which permits movement of the member in both a vertical and horizontal plane, and means for securing another end to the animal and which permits resilient movement in a direction substantially parallel to the longitudinal axis of the tethering member.

The present invention relates to a bicycle accessory and more particularly, relates to a device suitable for exercising a dog or other animal from a bicycle.

Dog tethering devices suitable for exercising dogs while riding a bicycle are well known in the art and there have been various proposals for such devices. Thus, U.S. Patent 4,134,364 shows a device which is attached to the frame structure of the bicycle. U.S. Patent 5,033,409 shows a further device using a triangulated frame work which is also attached to the bicycle frame. A further arrangement is shown in U.S. Patent 5,215,037 which provides for a pivoting connection between the dog's collar and the bicycle.

It is an object of the present invention to provide relatively simple and inexpensive dog tethering means for a bicycle.

It is a further object of the present invention to provide for a dog tethering means which provides for limited movement in different planes and directions.

According to one aspect of the present invention, there is provided an exercising device for exercising an animal while riding a bicycle, the device comprising an elongated tethering member, first attachment means for securing the member to a bicycle axle, the first attachment means permitting movement of the member in both a vertical and a horizontal plane, second attachment means for securing the member to the animal, the second attachment means

permitting resilient movement in a direction substantially parallel to a longitudinal axis of the elongated tethering member.

10 In greater detail, the tethering device of the present invention is adapted to provide means for exercising an animal such as a dog by securing the collar (or other suitable attachment point) of the animal to the axle of the bicycle. The device is adapted to provide limited movement in both a horizontal and a vertical plane and, at the same time, provide a resilient tensioning connection.

Having thus generally described the invention, reference will be made to the accompanying drawings illustrating an embodiment thereof, in which:

Figure 1 is a perspective view of a dog tethering device according to the present invention;

Figure 2 is an enlarged view of the tethering device of Figure 1;

Figure 3 is a top plan view thereof;

20 Figure 4 is a side elevational view of a partially in section; and

Figure 5 is a sectional view taken along the lines 5-5 of Figure 4.

Referring to the drawings in greater detail and by reference characters thereto, there is provided a tethering device generally designated by reference numeral 10 in which tethering device 10 is adapted to be connected to an axle A of a bicycle B for tethering a dog D.

Tethering device 10 includes a cylindrical member 12 having a protective covering 14 (such as a foam material) extending thereabout on the exterior. The first attachment means is located at one end of cylindrical member 12 and includes a bracket generally designated by reference numeral 16.

10 Bracket 16 includes a back or rear wall 18 having an aperture therein (not shown) and an upper wall 20 and lower wall 22. Upper wall 20 includes an aperture 34 formed therein while there is also provided an aperture (not shown) in lower wall 22.

20 Therein device 10 includes a retaining pin 24 having a downwardly extending leg 26 which extends within aperture 34 in upper wall 20 and the aperture in lower wall 22 (see Figure 4). An upper element 28 also forms a portion of retaining pin 24. An upper element 28 also forms a portion of retaining pin 24. As may be seen in Figure 3, a pair of bosses 30 and 32 are formed on the upper surface of upper wall 20 and which bosses 30 and 32 function to limit the movement of upper element 28.

A locking pin generally designated by reference numeral 36 is secured to a retaining member 38 which in turn is suitably secured to member 12.

Member 12 has, as may be seen in Figure 5, a pair of ears 40 and 42 to define therebetween a slot-like area 44. An aperture is formed in each of the ears 40 and 42 as well as in downwardly extending leg 26 to receive locking pin 36.

At the other end of cylindrical member 12, there is provided a connecting member 50 which, one end, is connected to a conventional clip 52 adapted to be releaseably attached to a dog collar or other element. At the other end, connecting member 50 is secured to one end of a coil spring 48 with the other end of coil spring 48 being connected to a fixed structural element 46 in the interior of cylindrical member 12.

10 In operation, bracket 16 is secured to the axle A of Bicycle B by means of the nut N conventionally employed on bicycle axles. As may be seen in Figure 2, cylindrical member 12 is free to move in the horizontal plane by a rotation of downwardly extending leg 26 within its mounting apertures. However, the movement is limited so as to prevent the animal coming too close to the bicycle by means of upper element 28 which can only move between bosses 30 and 32 which function as stop members. In the vertical plane, again limited movement is permitted by pivotal movement of member 12 about retaining pin 36. As will be
20 appreciated, limitation of this movement is not required.

In order to limit the forces exerted on the bicycle by the animal, coil spring 48 functions to soften any forces exerted by the animal pulling outwardly from the bicycle.

It will be understood that the above described embodiment is for purposes of illustration only and that changes and modifications may be made thereto without departing from the spirit and scope of the invention.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A dog tethering device for connection to a bicycle, the device comprising an elongated tethering member, said elongated tethering member having first attachment means for securing said member to a bicycle axle, said first attachment means permitting movement in both a horizontal plane and a vertical plane, and second attachment means permitting attachment of said member to an animal, said second attachment means permitting resilient movement in a direction substantially parallel to a longitudinal axis of said elongated tethering member.
2. The tethering device of Claim 1 wherein said first attachment means includes means to limit said movement in said horizontal plane.
3. The device of Claim 1 wherein said second attachment means includes spring means interconnecting said elongated member and said animal to thereby provide said resilient movement.
4. The device of Claim 1 wherein said first attachment means comprises a substantially U-shaped bracket having a back wall and first and second side walls, said back wall having an aperture for receiving said bicycle axle for mounting.

5. The device of Claim 4 wherein said elongated tethering means is secured between said first and second side walls.
6. The device of Claim 5 further including a pin member extending through said first and second side walls and said elongated tethering member, said pin member limiting movement of said tethering member in said horizontal plane.
7. The device of Claim 2 further including a protective covering about said elongated tethering member.

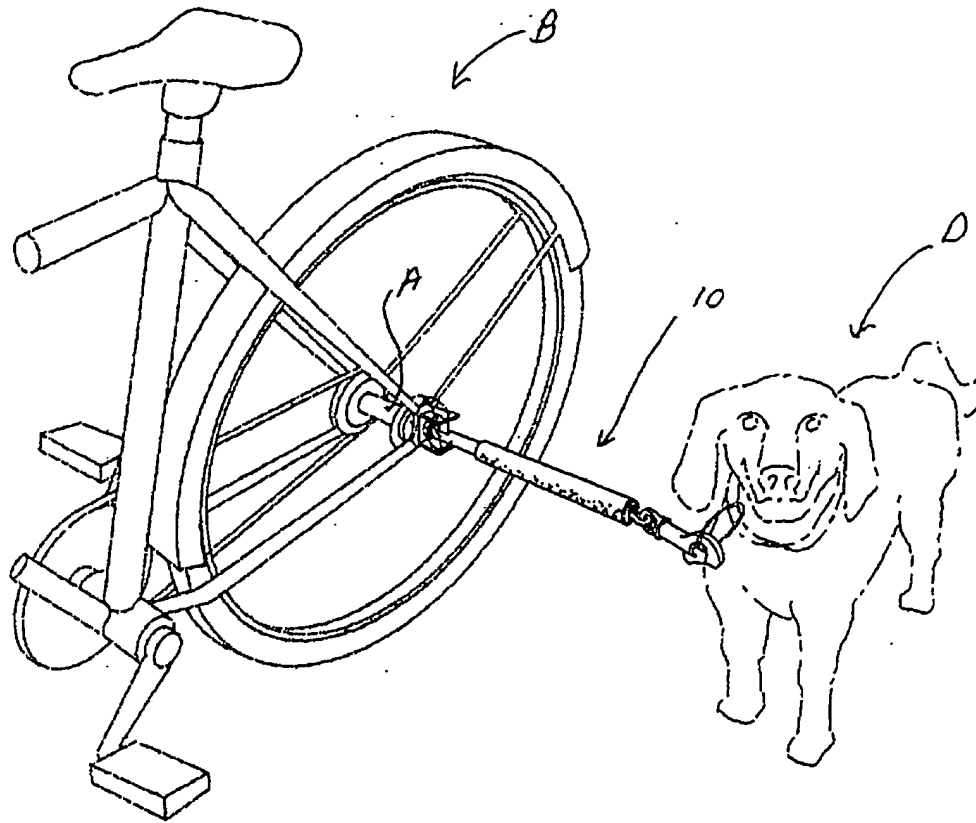


Fig- 1

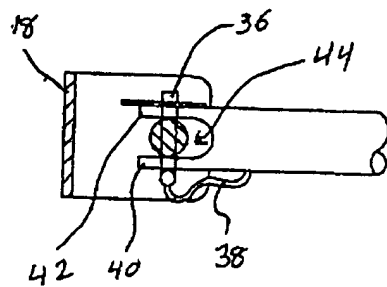


Fig- 5

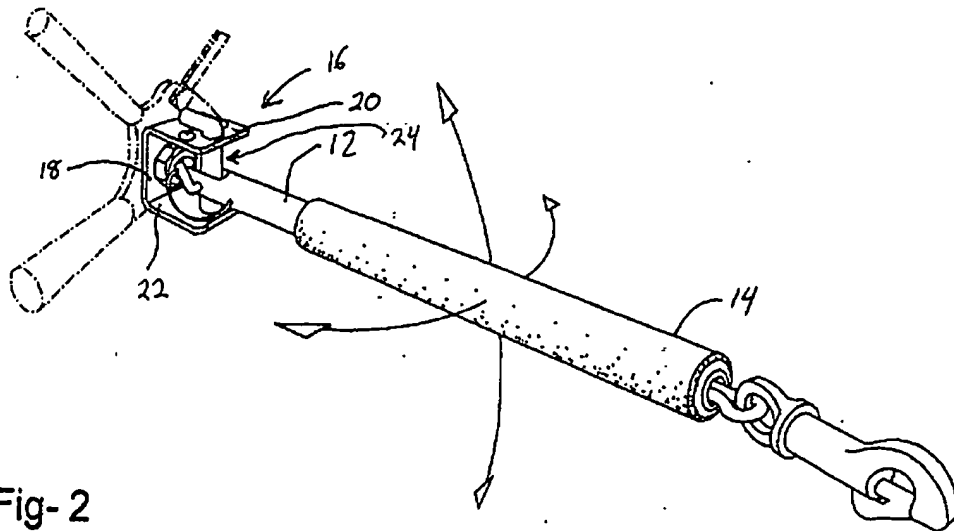


Fig- 2

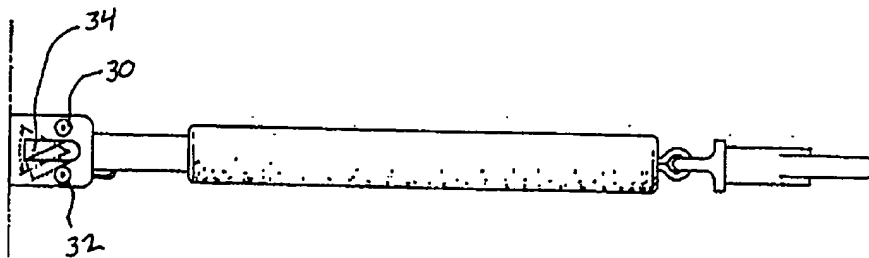


Fig- 3

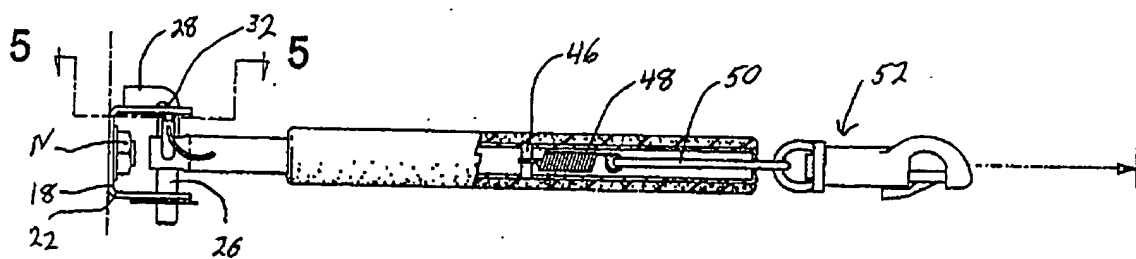


Fig- 4